# NOVITATES ZOOLOGICAE

Vol. XXXVII.

21 1111 -

JUNE 1932.

No. 2.

# NEW AFRICAN AND INDO-AUSTRALIAN LYMANTRIIDAE.

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(With Plate I.)

IN the following paper *Ridgway's Color Standards and Color Nomenclature*, 1912, has been employed in the colour descriptions, and the Comstock-Needham system for the wing-neuration.

All types, unless otherwise stated, are in the Tring Museum collection.

# 1. Cropera sericoptera sp. nov. (Plate I, fig. 34).

 $\Im$ . Palpus ochraceous buff, tipped with fuscous. Antenna fuscous, mixed on the shaft with pale yellow orange. Head, thorax, and pectus ochraceous buff, mixed on the tegula with fuscous. Abdomen above and beneath ochraceous buff to ochraceous orange. Forc- and midlegs with femora ochraceous buff, tibiae and tarsi fuscous; hindleg with femur and tibia ochraceous buff, tarsus and the two pairs of spurs fuscous. Forewing einnamon buff, slightly shaded with grey towards the termen; veins and terminal line fuscous; fringe ochraceous buff. Hindwing einnamon buff, slightly shaded with grey towards the apex; veins on the distal half of the wing, and terminal line, fuscous; fringe ochraceous buff. Underside of both wings, and fringes, as on upperside, with fuscous shading in the apical area of the forewing.

Expanse : 41 mm.

1 & (holotype), Muene Jndala, Angola, 25.ix.1903 (Ansorge).

Allied to *Cropera venata* Swinh. (1906), from which it may be easily distinguished by the different ground colour of the wings and the slightly larger size.

# 2. Redoa kibwezi sp. nov. (Plate I, fig. 37).

3. Palpus whitish, on the outer side orange buff mixed with fuscous. There is a short aborted proboscis. Antennal shaft fuscous mixed with white, pectinations sayal brown. Head whitish, with a tuft of orange buff below the base of the antenna. Thorax and abdomen whitish, with a small patch of orange buff dorsally on the thorax. Legs, pectus, and venter whitish, foreleg with orange buff on coxa, femur, and tibia, and fuscous on femur and tibia. Wings translucent. Forewing white; costa narrowly edged with fuscous; a faint medial shade, formed of a few dark scattered scales, running oblique inwardly from the origin of vein Cu2 to the inner margin; a faint postmedial shade, formed similarly, from the costa at three-quarters to the inner margin at three-quarters; fringe white. Hindwing and fringe white. Underside of both wings, and fringes, white, the apex and vein-ends of the forewing faintly shaded with fuscous.

Expanse : 33 41-49 mm.

1  $\stackrel{\circ}{\circ}$  (holotype) and 12  $\stackrel{\circ}{\circ}{\circ}$  (paratypes), Kibwezi, near Uganda Railway, Kenya Colony, March and December 1917, and January 1918; also, in the British Museum ex Joicey collection, 1  $\stackrel{\circ}{\circ}$ , Kibwezi, 3,000 ft., 14.xii.1921 (R. A. Dummer).

Nearest to *Redoa kenya* Collnt. (1931), but with a considerably shorter and broader areole.

In some specimens of R. *kibwezi*, vein R5 rises from the same point on the areole as the stalk of R3 and R4, and in others from considerably below that point, the origin of R5 being as far below that of R3 and R4 as R2 is above R3 and R4.

#### 3. Porthesia protea sp. nov. (Plate I, fig. 22).

♂. Palpus pale orange yellow, the third segment lighter. Antennal shaft cartridge buff, pectinations cinnamon buff. Head and thorax light orange yellow. Abdomen light orange yellow at base, the remainder cartridge buff mixed with hair brown, anal tuft cartridge buff. Legs, pectus, and venter cartridge buff, mixed on the foreleg with pale orange yellow. Forewing pale pinkish buff to pinkish buff, irrorated with fuscous, the irroration tending to be heavier medially in the lower half of the wing ; fringe pale pinkish buff. Hindwing and fringe pale pinkish buff, the proximal three-fourths of the wing shaded with hair brown. Underside of forewing, and fringes, pale pinkish buff, the proximal three-fourths of the wing shaded with hair brown. Underside of hindwing, and fringe, whitish, lightly shaded in the inner marginal area with hair brown.

 $\bigcirc$ . Resembles the  $\eth$ , but abdomen light orange yellow at base, the remainder fuscous; anal tuft light orange yellow. Hindwing and fringe, above and beneath, entirely hair brown.

Expanse : 33 21-25 mm., 99 31-34 mm.

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1  $\mathcal{J}$  (holotype), 1  $\mathcal{Q}$  (allotype), 11  $\mathcal{J}\mathcal{J}$  and 2  $\mathcal{Q}\mathcal{Q}$  (paratypes), August-September 1924, Nissan Island, Solomon Islands (A. F. Eichhorn).

The  $\Im \Im$  of this series show considerable variation, the dark irroration on the forewing of some specimens being almost absent, and the dark shading on the hindwing, above and beneath, entirely absent.

# 4. Porthesia stenoptera sp. nov. (Plate I, fig. 21).

 $\mathcal{J}$ . Palpus and head orange buff. Antennal shaft light ochraceous buff streaked with bone brown, pectinations wood brown. Thorax ochraceous orange. Abdomen fuscous black, anal tuft capucine yellow. Legs orange buff, the fore- and middlelegs fringed with capucine yellow. Pectus orange buff. Venter orange buff mixed with capucine yellow. Forewing and fringe velvety bone brown mixed with fuscous black; from the apex to vein  $M^2$  there is an admixture of capucine yellow in the fringe, and from vein  $Cu^1$  to the tornus the fringe is entirely capueine yellow, the same colour slightly invading the wing between these two points. Hindwing velvety bone brown mixed with fuscous black; fringe capucine yellow, darker at the anal angle. Underside of fore- and hindwing, and fringes, as on *upperside*, but the colour of the wings is slightly duller and less velvety, and at the apex of the forewing the capucine yellow of the fringe slightly invades the wing.

Expanse : 23-27 mm.

1  $\mathcal{J}$  (holotype) and  $3\mathcal{J}\mathcal{J}$  (paratypes), Bougainville, Solomon Islands, April and May 1904 (A. S. Meck).

The forewing of this species is rather long and narrow, and the coloration of the four specimens is very uniform.

# 5. Porthesia potamia sp. nov. (Plate I, fig. 25).

 $\bigcirc$ . Palpus cinnamon buff. Antennal shaft cinnamon buff, the pectinations slightly darker. Head cream colour, vertex cartridge buff. Thorax cartridge buff, posteriorly ochraceous buff. Abdomen ochraceous buff to orange buff, anal tuft fuscous black, fringed at the base with cartridge buff. Legs, pectus, and venter ochraceous buff to cartridge buff. Forewing cartridge buff, irrorated interneurally over the whole wing, but less strongly at the base and in the costal area, with ochraceous tawny ; a faint antemedial fascia, indicated by a decrease in the irroration, running oblique inwardly from the origin of vein Cu2 to the inner margin ; a rather broad postmedial fascia, indicated by a decrease in the irroration, roughly parallel with the termen from costa to anal vein, thence at right angles to the inner margin ; fringe cartridge buff, mixed interneurally with ochraceous tawny. Hindwing cartridge buff faintly suffused with cream colour, the area from cell to inner margin orange buff ; fringe cartridge buff. Underside of both wings cartridge buff faintly suffused with cream colour, and mixed over the basal third of each wing with orange buff ; fringes cartridge buff.

Expanse : 9947-49 mm.

1  $\bigcirc$  (holotype) and 3  $\bigcirc$  (paratypes), Angabunga River, affluent of St. Joseph River, British New Guinea, 6,000 ft. upwards, November 1904–February 1905 (A. S. Meek).

## 6. Porthesia anomoeoptena sp. nov. (Plate I, fig. 30).

3. Palpus cream buff. Antennal shaft cartridge buff, pectinations sayal brown. Head and thorax cartridge buff, tinged on frons and patagium with cream buff. Abdomen light orange yellow. Legs and pectus cartridge buff to cream buff. Venter orange yellow. Forewing cartridge buff, basal half of costa narrowly edged with cream buff; fringe cartridge buff. Hindwing light orange yellow, in some specimens becoming lighter in the terminal area; fringe cartridge buff. Underside of both wings light orange yellow, grading to cartridge buff in the terminal areas and in the inner marginal area of the forewing; fringe cartridge buff.

 $\mathfrak{Q}$ . Resembles the  $\mathfrak{d}$ , but the light orange yellow on the hindwing, and on the *underside* of both wings, of a rather paler tint.

Expanse : ♂♂ 20-26 mm., ♀♀ 34-35 mm.

1  $\mathcal{J}$  (holotype), 1  $\mathcal{Q}$  (allotype), 3  $\mathcal{J}\mathcal{J}$  and 2  $\mathcal{Q}\mathcal{Q}$  (paratypes), November and December 1898, Dammer Island, Moluccas (H. Kühn).

A very distinct species, in which the colour of the forewing contrasts strongly with that of the hindwing. It may be placed near to *Porthesia biagi* B.-Bak. (1908).

#### 7. Euproctis frigidior sp. nov. (Plate I, fig. 7).

3. Palpus deep ehrome, slightly darker on the upper side. Antennal shaft deep chrome, pectinations einnamon. Head and thorax deep chrome. Abdomen antimony yellow. Foreleg deep ehrome, mid- and hindleg rather lighter. Pectus and venter antimony yellow. Forewing light orange yellow; an antemedial faseia of deep chrome, bowed (concavity basad) from costa to inner margin; a conspicuous orange rufous discocellular spot, about one millimetre in diameter, only faintly indicated in some of the paratypes, but never completely absent; a postmedial fascia of deep chrome, followed by a broader subterminal faseia of the same colour, the space between them filled in with pale orange yellow, both fasciae running roughly parallel with the termen to vein Cu1, thenee slightly bowed (concavity terminated) to the inner margin; a rather indistinct deep ehrome preterminal fascia, parallel with the termen, on a ground of pale orange yellow; fringe pale orange yellow mixed with light orange yellow. Hindwing pale orange yellow, slightly darker in the inner marginal area; fringe pale orange yellow. Underside of both wings pale orange yellow, the costa in both eases shaded with light orange yellow; fringes pale orange yellow.

Q. Resembles the  $\mathcal{J}$ , but with anal tuft einnamon brown, and the faseiae on the forewing only faintly visible.

Expanse : 3328-37 mm., average about 35 mm. ; 9939-51 mm., average about 48 mm.

1  $\circ$  (holotype), 1  $\circ$  (allotype), 294  $\circ$   $\circ$  and 58  $\circ$   $\circ$  (paratypes), Diego Suarez. Madagascar, taken in each of the months December 1916–September 1917 (G. Melou); 8  $\circ$   $\circ$ , Kulau, N.E. Madagascar (G. Melou); 1  $\circ$  and 1 $\circ$ , Sakaramy, N.E. Madagascar, February 1917 (G. Melou); 1  $\circ$ , Ambinanindrano, W. of Mohonoro, Madagascar, September 1916 (Kestell-Cornish); also, in the British Museum collection, 4  $\circ$   $\circ$  and 1  $\circ$  (paratypes), Diego Suarez (ex Joicey collection), and 1  $\circ$ , Briekaville, Central Madagascar, 1916 (Lamberton, ex Oberthür collection).

This species has been confused previously with Artaxa fervida Wlkr. (1863), An examination of the type  $\mathcal{J}$  of A. fervida shows that the insect is a Porthesia, with vein M3 of the hindwing absent. The abdomen is dark, and contrasts with the anal tuft, which is Mars yellow. The ground colour of fore- and hindwings is darker than in Euproctis frigidior, and there is no trace of the discocellular spot. The type (British Museum collection) was taken near Antananarivo, and is unique.

## 8. Euproctis florensis sp. nov. (Plate I, fig. 8).

♂. Palpus pale orange yellow, on the outer side fuseous. Antennal shaft eartridge buff, pectinations ochraceous buff. Head pale orange yellow, lighter on the vertex. Thorax cartridge buff. Abdomen pale orange yellow with a broad band of fuseous posteriorly; anal tuft ochraceous buff. Pectus and legs cartridge buff, venter pale orange yellow. Forewing and fringe cartridge buff; a broad conspicuous tawny streak on the discocellulars, enclosed with a broken ring of fuseous black; a few scattered tawny and fuseous black scales in the inner marginal area. Hindwing and fringe whitish. Underside of both wings, and fringes, whitish.

2. Palpus, head, thorax, and legs cartridge buff. Abdomen pale yellow

orange, anal extremity olive brown. Wings as in the  $\Im$ , excepting that the only mark on the forewing is a heavy line of fuscous black surrounding the disco-cellulars.

Expanse :  $\sqrt[3]{43}$  mm., 2254-55 mm.

1 3 (holotype) November 1896, 1  $\bigcirc$  (allotype) and 1  $\bigcirc$  (paratype) October 1896, dry season, S. Flores (Everett).

# 9. Euproctis fulvobrunnea sp. nov. (Plate 1, fig. 20).

 $\Im$ . Palpus, head, and thorax capucine yellow to orange, the tegula with some long bushy hair-seales which reach beyond the end of the thorax. Antennal shaft ochraceous buff, the pectinations somewhat darker. Abdomen Brussels brown, mixed towards the base with capucine yellow; anal tuft drab. Legs, pectus, and abdomen pale yellow orange to capucine yellow, the latter colour predominating on the foreleg. Forewing Brussels brown; costa narrowly edged with orange buff, this colour continuing round the apex on the fringe as far as vein R5; remainder of fringe Brussels brown mixed with tawny olive. Hindwing Brussels brown, basal half of costal area pale yellow orange; fringe Brussels brown mixed with tawny olive. Underside of forewing snuff brown, basal half of inner marginal area somewhat lighter; costa edged with orange buff more broadly than on upperside; fringe snuff brown mixed with tawny olive. Underside of hindwing snuff brown; basal half of costal area broadly edged with orange buff; fringe snuff brown mixed with tawny olive.

Expanse : 33 24-26 mm.

1  $\mathcal{J}$  (holotype), north side of Choiseul Island, Solomon Islands, December 1903 (A. S. Meek); 3  $\mathcal{J}\mathcal{J}$  (paratypes), south side of Choiseul Island, 1904 (A. S. Meek).

In facies somewhat resembles the darker forms of *Porthesia fulvonigra* Swinh. (1903), but is distinguishable at once by the presence of vein M2 in the hindwing.

# 10. Euproctis petasma sp. nov. (Plate I, fig. 29).

J. Palpus Mars yellow. Antennal shaft buckthorn brown, the pectinations lighter. Head antimony yellow. Thorax warm buff. Abdomen warm buff mixed with antimony yellow. Legs warm buff, mixed on coxa, tibia, and tarsus of foreleg, and tibia and tarsus of middleleg, with Mars yellow. Pectus and venter warm buff. Forewing warm buff ; a rather broad antemedial fascia, lighter than the ground colour, strongly bowed (concavity basad) from costa to anal vein, thence at right angles to inner margin ; a sinuous postmedial fascia, lighter than the ground colour, from the costa at three-fourths to inner margin at threefourths ; a thin border of Brussels brown on the proximal side of the antemedial fascia and also on the distal side of the postmedial fascia, in each case ending in a patch of Brussels brown on the inner margin ; a tongue of Brussels brown between veins M3 and Cu1, from postmedial to termen, and a patch of the same colour below the origin of vein R5; some Sudan brown shading at the base of the wing, medially, and along the costa and termen ; fringe Sudan brown. Hindwing light buff, darkening to warm buff along the inner margin ; fringe light buff. Underside of both wings light buff ; costa and fringe of forewing Sudan brown ; fringe of hindwing light buff.

Expanse : 33 23-25 mm.

1 ♂ (holotype) and 9 ♂♂ (paratypes), Biagi, Mambaré River, British New Guinea, 5,000 ft., February-April 1906 (A. S. Meek).

# 11. Euproctis hemigenes sp. nov. (Plate I, fig. 24).

 $\stackrel{\circ}{\rightarrow}$ . Palpus clay colour, on the outer side of second segment fuscous. Antenna tawny olive, mixed on the shaft with fuscous. Head elay colour to buffy brown. Thorax antimony yellow. Abdomen elove brown above and beneath, anal tuft cream colour. Peetus and legs drab to buffy brown. Forewing antimony yellow; the whole of the medial area, excepting above the cell and vein  $R_5$ , irrorated interneurally with bistre, the irroration extending in the same degree to the termen between veins  $R_5$ ,  $M_1$ , and  $M_2$ , and very lightly over the remainder of the terminal area; fringe antimony yellow mixed sparsely with bistre. Hindwing bistre; a band of antimony yellow along the costa, broad at the base and narrowing towards the apex; fringe bistre, somewhat lighter at the base. Underside of forewing antimony yellow, very lightly shaded with bistre between veins  $R_5$ ,  $M_1$ , and  $M_2$ ; fringe antimony yellow. Underside of hindwing, and fringe, as on upperside.

Expanse : 53 39-41 mm.

1  $\mathcal{J}$  (holotype) and 1  $\mathcal{J}$  (paratype), Ninay Valley, Central Arfak Mountains, Dutch New Guinea, 3,500 ft., November 1908–January 1909; also, in the British Museum ex Kenrick collection, 1  $\mathcal{J}$  (paratype), Arfak Mountains, 6,000 ft., March 1910 (C. B. and F. B. Pratt).

Nearest to *Euproctis swinhoei* B.-Bak. (1904). The light-coloured band along the costa of the hindwing, on both upper- and undersides, is a distinguishing feature.

## 12. Euproctis ochropleura sp. nov. (Plate I, fig. 13).

3. Palpus orange buff. Antennal shaft pale yellow orange to orange buff, pectinations light ochraceous buff. Head pale yellow orange mixed with orange buff. Thorax orange buff. Abdomen pale yellow orange, dorsally at the base orange buff. Legs orange buff. Peetus and venter pale yellow orange. Forewing orange buff to capucine yellow; veins over the whole wing pale yellow orange ; a rather broad pale yellow orange antemedial faseia, bowed (concavity basad) from costa to inner margin; a faint streak of pale yellow orange on the discocelhilars; a postmedial fascia of pale yellow orange, commencing at the origin of vein R5, bowed (concavity terminad) to vein M3, and inwardly oblique slightly bowed (concavity terminad) to the inner margin; on the distal side of the postmedial a broad band of Mars yellow, broken at the veins; some Mars yellow shading interneurally in the terminal area; fringe pale yellow orange mixed with eapueine yellow. Hindwing cream colour, shaded in the inner marginal and terminal areas with orange buff; fringe orange buff. Underside of forewing pale yellow orange, costal area and fringe orange buff. Underside of hindwing and fringe pale yellow orange.

Expanse : 33 30-31 mm.

1 3 (holotype) and 1 3 (paratype), Mt. Goliath, Central Dutch New Guinea, about long. 139°, 5,000–7,000 ft., February 1911 (A. S. Meek).

#### 13. Euproctis geometroides sp. nov. (Plate I, fig. 31).

J. Palpus warm buff. Antenna Prout's brown. Head Prout's brown, mixed on the frons with warm buff. Thorax Prout's brown mixed dorsally with orange. Abdomen fuscous, the base of each segment broadly edged with orange. Legs and pectus light buff to warm buff, the tibiae of mid- and hindlegs irrorated with Prout's brown. Venter warm buff to orange. Forewing warm sepia; a patch of orange in the angle between the cell and the anal vein, reaching to the origin of vein Cu2, mixed at the edges with warm sepia, its distal margin oblique outwardly ; a large oval patch of orange placed medially, running from the origin of vein  $M_1$  towards the tornus : a smaller patch of orange midway between the discocellulars and the apex, roughly crescent-shaped with coneavity basad, reaching from vcin R5 to vcin M3; a spot of orange subterminally on vcin Cu1, and a subterminal streak from vein Cu2 to the termen; fringe warm sepia, with a few orange scales near the apex. Hindwing warm sepia ; a central orange patch occupying almost half the area of the wing, reaching from vein M1 to the inner margin, and entering the cell only at its lower angle ; a subterminal streak of orange mixed with ground colour, running from vein  $Cu^2$  to the inner margin; fringe orange, warm sepia at base. Underside of forewing with orange area much increased, the two proximal patches joined and occupying, in addition, the whole of the inner marginal area; a streak of orange between the cell and the costa; fringe as on upperside. Underside of hindwing, and fringe, as on upperside, but with the central orange patch somewhat increased in size.

Expanse: 45 mm.

1 3 (holotype), Bangkei, Eastern Celebes.

Related to Euproctis josiata Wlkr. (1865).

In the British Museum collection is a single  $\sigma$  from the region between Maros and Tjamba, near Macassar, Celebes, 1896 (W. Doherty), which is slightly larger (48 mm.) and has the medial patch of orange on the forewing extended in size and reaching almost from the costa to the inner margin.

# 14. Euproctis gilvivirgata sp. nov. (Plate I, fig. 32).

♀. Palpus and head ochraceous orange to ochraceous buff. Antenna light ochraceous buff, the shaft slightly paler. Thorax clove brown, with a few long upstanding hair-scales of light ochraceous buff; patagium ochraceous orange. Abdomen orange buff, the anal extremity hair brown dorsally, cartridge buff laterally. Pectus, venter, and legs orange buff to light ochraceous buff. Forewing bone brown, the veins and inner margin heavily outlined throughout with cartridge buff, and an additional streak of the same colour above and running parallel with the anal vein; costa tinged with ochraceous buff; a few long light ochraceous buff. Hindwing ochraceous buff; fringe light ochraceous buff. Wings beneath ochraceous tawny, the veins of forewing outlined with ochraceous buff. Winges buff and the distal half of wing shaded interneurally with russet; fringes ochraceous buff.

Expanse : 63 mm.

1  $\bigcirc$  (holotype), Mt. Goliath, long. 139°, Central Dutch New Guinea, 5,000–7,000 ft., January 1911 (A. S. Meek),

## 15. Euproctis ochrocraspeda sp. nov. (Plate I, fig. 4).

2. Palpus light buff mixed with fuseous. Antennal shaft pinkish buff, pectinations fuseous. Head pinkish buff mixed with fuseous; from with a central patch of light buff bordered with fuscous. Thorax bistre : patagium ninkish buff : tegula with some long cream colour hair-scales. Abdomen bistre ; anal tuft tawny olive mixed with bistre, lighter at its base. Legs light buff to pinkish buff ; some fuscous scaling on tibia of foreleg ; femur and tibia of hindleg mainly bistre. Peetus and venter bistre. Forewing cream colour ; basal portion of wing bistre, the distal boundary of this area strongly bowed (convexity terminad) from eosta at one-fourth, through the point of origin of vein Cu2, to the inner margin at one-half; over this area and along the whole of the inner margin some long upstanding cream colour hair-scales; a well-defined bistre postmedial fascia, bowed (concavity apicad) from costa at two-thirds to vein M3, thence inwardly oblique to below vein  $Cu^2$ , thence to inner margin at right angles; on the distal side of the postmedial a band of bistre irroration, not reaching the termen, narrowest at vein Cu2, densest between vein Cu2 and the inner margin; fringe cream eolour mixed with a few bistre seales. Hindwing bistre; veins from the termen, for a distance of about 3 mm., cream eolour ; fringe eream colour mixed sparsely with bistre. Underside of forewing cream colour; basal area bistre as on upperside ; there is no postmedial faseia, but beyond the postmedial area, from costa to vein Cu1, and not reaching the termen, is an irregular patch of dense bistre irroration ; fringe as on upperside. Underside of hindwing bistre; a band of cream colour, irrorated sparsely with bistre and about 3 mm. broad, bordering the termen ; fringe as on upperside.

Expanse : 9954-56 mm.

1  $\bigcirc$  (holotype) and 4  $\bigcirc \bigcirc$  (paratypes), Biagi, Mambare River, British New Guinea, 5,000 ft., January-April 1906 (A. S. Meek).

Resembles *Euproctis seminigra* Joic. and Talb. (1916), but considerably smaller. Among other differences the  $\varphi$  of *E. seminigra* does not possess the broad light-coloured band bordering the termen on the underside of the hindwing.

#### 16. Euproctis ochrocerca sp. nov. (Plate I, fig. 1).

♂. Palpus bistre, on the upperside darker. Antennal shaft snuff brown mixed with fuseous, peetinations ochraceous tawny. Head and thorax snuff brown, the vertex in front ochraceous tawny. Abdomen amber brown, anal tuft eartridge buff. Peetus and legs ochraceous tawny, tibiae fuseous fringed with ochraceous tawny, tarsi fuseous. Venter amber brown. Forewing pale pinkish buff, irrorated so thickly with argus brown that the ground colour is searcely visible; a patch of pale pinkish buff on the discocellulars; fringe argus brown, mixed with fuseous between the veins. Hindwing Mars yellow; fringe Mars yellow mixed with snuff brown. Underside of forewing Mars yellow, irrorated with snuff brown along the costa, broadly over the apieal area, and narrowing in the terminal area down to the tornus; fringe snuff brown mixed with fuseous. Underside of hindwing Mars yellow, irrorated, except in the inner marginal area, with snuff brown; fringe snuff brown.

 $\mathcal{Q}$ . Resembles the  $\mathcal{J}$ , but somewhat lighter. Anal tuft drab, ringed narrowly at the base above, and more broadly beneath, with whitish. The irroration on the forewing is amber brown, and there is no patch of pale pinkish buff on the

discocellulars. On the *upperside* of hindwing there is faint irroration along the termen and on the veins.

Expanse : 3 58 mm., 9 69 mm.

1 3 (holotype) and 1  $\heartsuit$  (allotype), Ninay Valley, Central Arfak Mountains, Dutch New Guinea, 3,500 ft., November 1908–January 1909.

Somewhat resembles Euproctis aroa B.-Bak. (1904), but is larger, and the upperside of the forewing uniform in coloration.

# 17. Euproctis diselena sp. nov. (Plate I, fig. 15).

J. Palpus light ochraceous buff. Antennal shaft cream colour, the peetinations light oehraceous buff. Head Naples yellow. Thorax anteriorly Naples yellow, posteriorly (including the distal half of the tegula) tawny. Abdomen tawny, anal tuft cream colour. Legs whitish ; tibia and tarsus of foreleg Naples yellow, and an admixture of Naples yellow on tibia and tegula of middleleg. Peetus and venter whitish. Forewing russet ; eostal area and distal third of wing Naples yellow, slightly darker on the veins; the Naples yellow area along the eosta reaches the cell excepting just before the discocellulars, where the russet area almost reaches the costa; a tongue of russet projects towards the apex, reaching a point midway between the origins of veins R2 and R3; a further tongue of russet projects between veins M3 and Cul almost to the termen; a rather large white spot, almost eircular, inside the lower angle of the cell; a small white spot just inside the russet area between the bases of veins Cul and Cu2, and a similar spot between the bases of veins M2 and M3; fringe Naples yellow. Hindwing whitish, lightly suffused over the centre of the wing and in the inner marginal area with Naples yellow ; fringe whitish. Underside of forewing eream colour; a few seattered russet scales in and beyond the cell; costa and fringe Naples yellow. Underside of hindwing and fringe whitish.

Expanse : 27-29 mm.

1 ♂ (holotype) and 1 ♂ (paratype), Biagi, Mambare River, British New Guinea, 5,000 ft., February-March 1906 (A. S. Meek).

There is a single  $\Im$  in the Tring Museum from Ninay Valley, Central Arfak Mountains, Dutch New Guinea, in which the russet area on the forewing is slightly reduced, the white spot between veins Cu1 and Cu2 being at the junction of the russet and Naples yellow areas.

# 18. Euproctis asaphobalia sp. nov. (Plate I, fig. 3).

thorn brown. Hindwing orange buff, shaded in and below the cell, and interneurally along the termen, with buckthorn brown; fringe orange buff mixed with buckthorn brown. *Underside* of both wings, and fringes, buckthorn brown, the veins of both wings faintly outlined with pale orange yellow.

Expanse : 59-62 mm.

 $1 \Leftrightarrow$  (holotype) and  $4 \Leftrightarrow \varphi \varphi$  (paratypes), Biagi, Mambare River, British New Guinea, 5,000 ft., January-March 1906 (A. S. Meek). In the British Museum, ex Oberthür collection,  $1 \Leftrightarrow$  (paratype) with the same data.

Somewhat resembles *Euproctis tetrabalia* Collnt. (1930), from which it may be readily distinguished by the position of the oblong whitish patch below the cell, obliquely across the anal vein in *E. tetrabalia*, and running along the vein in the present species.

# 19. Euproctis aeruginosa sp. nov. (Plate I, fig. 5).

J. Palpus antimony yellow, on the inner and outer side fuscous. Antennal shaft antimony yellow, the peetinations darker. Head light orange yellow. Thorax zanthine orange, the patagium light orange yellow. Abdomen xanthine orange mixed with light orange yellow, anal tuft antimony yellow. Legs, pectus, and venter light orange yellow mixed with pinkish buff. Forewing with proximal four-fifths army brown, the distal boundary of this area almost straight, crossing vein M3 at one-half, and with a slight projection towards the termen just below vein M3; distal one-fifth of wing pale orange yellow, interneurally deep chrome; a patch of pale orange yellow at the base of the inner margin ; a patch of pale orange yellow on the discocellulars, almost rectangular in shape, beyond which, between veins M1 and M2, the ground colour is for a short distance mixed with xanthine orange; costa narrowly edged with antimony vellow; fringe pale orange yellow. Hindwing pale orange yellow mixed with light orange yellow, shaded in the inner marginal area with deep chrome; fringe pale orange yellow. Underside of both wings, and fringes, pale orange yellow mixed with light orange vellow.

Expanse : 33-34-38 mm.

1  $\mathcal{J}$  (holotype) and 6  $\mathcal{J}\mathcal{J}$  (paratypes), near Oetakwa River, Snow Mountains, Dutch New Guinea, up to 3,500 ft., October-December 1910 (A. S. Meek); also, in the British Museum, ex Joicey collection, 2  $\mathcal{J}\mathcal{J}$  (paratypes) with the same data. 3  $\mathcal{J}\mathcal{J}$ , Upper Setekwa River, Snow Mountains, 2,000-3,000 ft., August 1910 (A. S. Meek).

20. Euproctis gita sp. nov. (Plate I, fig. 18).

 $\bigcirc$ . Palpus, head, and thorax tilleul buff mixed with pinkish buff. Antennal shaft tilleul buff, pectinations pinkish buff. Abdomen sepia, basal segments tilleul buff mixed with pinkish buff. Legs and peetus tilleul buff mixed with pinkish buff. Venter sepia. Forewing and fringe tilleul buff faintly suffused with light drab; a postmedial faseia of light drab running roughly parallel with the termen. Hindwing tilleul buff, distal half of wing lighter; fringe whitish. Underside of both wings, and fringes, tilleul buff to whitish.

Expanse : 9945-46 mm.

1  $\bigcirc$  (holotype) and 1  $\bigcirc$  (paratype), Angabunga River, affluent of St. Joseph River, British New Guinea, 6,000 ft. upwards, November 1904–February 1905 (A. S. Meek). 1  $\bigcirc$ , Biagi, Mambare River, 5,000 ft., April 1906 (A. S. Meek).

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#### 21. Euproctis talesea sp. nov. (Plate I, fig. 2).

 $\sigma$ . Palpus fuscous black, with a small cartridge buff spot proximally on the lower side of the second segment. Antennal shaft fuscous black, pectinations ochraceous tawny. Head and thorax fuscous black, with a few long and upstanding light buff hair-scales arising from behind the base of the antenna and from the tegula. Abdomen fuscous black, anal tuft cartridge buff. Legs fringed with rather long hair, fuscous. Pectus and venter fuscous black, the pectus with a patch of light buff in front. Forewing fuscous, the veins outlined with tilleul buff ; some long and upstanding light buff hair-scales along the inner margin ; fringe fuscous, lighter at the vein-ends. Hindwing with basal half fuscous, distal half and fringe deep ehrome. Underside of forewing fuscous ; a small spot of light orange yellow on the discocellulars ; fringe fuscous. Underside of hindwing with basal half fuscous, distal half and fringe light orange yellow.

Expanse : 33 53 mm.

1 ♂ (holotype) March-April 1925, 1 ♂ (paratype) January 1925, Talesca, New Britain, Bismarck Archipelago (A. F. Eichhorn).

May be placed near to Euproctis sublutea B.-Bak. (1904).

#### 22. Euproctis xuthocloea sp. nov. (Plate I, fig. 19).

J. Palpus xanthine orange. Antenna warm buff, the shaft somewhat lighter. Head massicot yellow, below and behind the eye xanthine orange. Thorax massicot yellow to baryta yellow, patagium xanthine orange. Abdomen ivory yellow, posterior segments xanthine orange, anal tuft ivory yellow. Legs, pectus, and venter ivory yellow to cream buff, the pectus in front, and the inner side of foreleg, shaded with xanthine orange. Forewing baryta yellow, costa at base narrowly edged with xanthine orange ; fringe baryta yellow. Hindwing ivory yellow, mixed on the inner marginal area with baryta yellow ; fringe ivory yellow. Underside of both wings, and fringes, ivory yellow ; basal half of costa of forewing xanthine orange.

 $\bigcirc$ . Resembles the  $\circlearrowleft$ , but there is no xanthine orange on the patagium, and this colour on the palpus, head, foreleg, and costa of forewing is much reduced.

Expanse : ♂♂ 28-32 mm., ♀ 42 mm.

1 3 (holotype), 1  $\bigcirc$  (allotype), and 8 33 (paratypes), Biagi, Mambare River, British New Guinea, 5,000 ft., March and April 1906 (A. S. Meek).

The conspicuous xanthine orange patagium of the  $\sigma$  of this species is a distinguishing feature.

## 23. Euproctis hypocloa sp. nov. (Plate I, fig. 35).

5. Palpus and head orange buff, thorax somewhat lighter. Antennal shaft orange buff, pectinations ochraceous tawny. Abdomen pale orange yellow. Legs, pectus, and venter pale orange yellow, mixed on the pectus, and on the femur and tibia of foreleg, with orange buff. Forewing mustard yellow, darker at the base of the costa; an antemedial fascia of Sandford's brown, broken at the veins, running oblique inwardly in the upper half of the cell, then oblique outwardly almost to the lower angle of the cell, and from below the origin of vein  $Cu^2$  oblique inwardly to the anal vein; a postmedial faseia, broken at the veins, running parallel with the termen from vein R4 to vein M2, thenee bowed outwardly (concavity basad) to vein  $Cu^2$ , and bowed inwardly (concavity terminad) to the anal vein: fringe mustard yellow. Hindwing and fringe pale orange yellow. Underside of fore- and hindwing, and fringes, pale orange yellow, shading in the costal and apical area of the forewing to orange buff.

Expanse: 48 mm.

1  $_{\odot}$  (holotype), Upper Aroa River, British New Guinea, April 1903 (A. S. Meek).

# 24. Euproctis celidota sp. nov. (Plate 1, fig. 27).

 $\Im$ . Palpus warm buff. Antennal shaft warm buff, the peetinations somewhat darker. Head pale orange yellow. Thorax benzo brown, patagium and base of tegula oehraceous buff. Abdomen benzo brown, anal tuft oehraceous buff. Legs, peetus, and venter pale orange yellow to warm buff. Forewing benzo brown; a broad margin of light orange yellow in the terminal area, still broader at the apex and extending narrowly along the costa; a large and almost round fuscous subterminal spot reaching from vein R5 to midway between veins M1 and M2; fringe light orange yellow. Hindwing benzo brown; distal one-fourth of wing, and fringe, light orange yellow. Wings beneath as on the upperside, but the subterminal spot is not present, the light orange yellow is replaced on both wings by pale yellow orange, and the benzo brown area is slightly deereased.

 $\mathfrak{Q}$ . Resembles the  $\mathfrak{J}$ , but the margin of light orange yellow on fore- and hindwing is less broad.

Expanse : ♂♂ 33-35 mm., ♀ 46 mm.

1  $_{\circ}$  (holotype), Mt. Gedeh, Java, August 1926; 1  $\bigcirc$  (allotype), West Java; in the British Museum, ex Joicey collection, 2  $_{\circ}$   $_{\circ}$  (paratypes), Mt. Gedeh, 4,000 ft., 25.x.1924 and 2.xi.1924 (G. Overdijkink).

This species is considerably larger than *Euproctis linta* Moore (1859) and *Euproctis nubilosa* Eecke (1928), and the subterminal spot on the forewing is nearer to the tornus.

# 25. Dasychiroides nesites sp. nov. (Plate I, fig. 28).

J. Palpus whitish, on the outer side olive brown. Antennal shaft whitish, peetinations ochraceous tawny. Head whitish, the area surrounding the eye olive brown. Head and thorax whitish mixed sparsely with buffy brown. Abdomen whitish. Legs, peetus, and venter whitish, mixed on the upperside of tibia and tarsus of foreleg with olive brown. Forewing whitish, irrorated over the whole wing with buffy brown to olive brown, giving a "grey" effect; traces of irregular antemedial, postmedial, and subterminal fasciae; an olive brown streak on the discocellulars, absent in some of the paratypes; a series of terminal interneural olive brown spots, continued round the apex and along the costa; fringe whitish. Hindwing and fringe whitish, faintly shaded on the inner marginal area with buffy brown. Underside of fore- and hindwings, and fringes, whitish; the interneural spots are faintly reproduced along the margin of the forewing at the apex, and the inner marginal area of the hindwing is shaded as on the *upperside*.

Expanse : 33 45-51 mm.

1 3 (holotype) and 9 33 (paratypes), Talesea, New Britain, January-April 1925 (A. F. Eichhorn); also, in the British Museum, ex Joicey collection, 2 33 with the same data.

Nearest to *Dasychiroides pratti* B.-Bak. (1904). As in some other species of the genus, there is considerable variation in the intensity of markings on the forewing, and the area between antemedial and postmedial may be entirely filled in with a conspicuous band of buffy brown to olive brown. *D. nesites* is easily separated from other species by the light hindwing.

#### 26. Dasychiroides nesites nesiotica subsp. nov.

 $\vec{\sigma}$ . Not separable from *D. nesites nesites* Collnt. on external characters, but very distinct in the genitalia.

*Male genitalia.* The valve bears a curious club-like process directed dorsad, and this process terminates in a tuft of bristles. In D. nesites nesites this brush consists of short bristles, whilst in D. n. nesite a the bristles are twice the length of those in the New Britain subspecies.

Expanse : 33 45-49 mm.

1 3 (holotype) and 10 33 (paratypes), New Ireland, November 1923– January 1924 (A. F. Eichhorn); also, in the British Museum, ex Joicey collection, 1 3 with the same data.

#### 27. Aroa celaenostola sp. nov. (Plate I, fig. 10).

3. Palpus cream buff. Antennal shaft dark olive buff, pectinations olive brown. Head ochraceous buff. Thorax and abdomen bistre, mixed on the thorax with ochraceous buff. Legs, pectus, and venter cream buff mixed with chamois. Forewing bistre, irrorated, especially in the apical area, with ochraceous buff ; a large fuscous spot on the discocellulars ; a broad oblique fascia of buff vellow across the medial area, from the costa at one-half to the tornus, obsolescent above the cell, narrowed where it crosses vein Cu2, and continued on to the fringe; remainder of fringe bistre. Hindwing with termen slightly produced to an angle opposite vein Cu1; the wing bistre, with a patch of buff yellow in the terminal area from vein M2 to the anal angle, including the fringe; remainder of fringe bistre. Underside of forewing bistre; the apex irrorated with buff yellow; a bistre spot on the discocellulars ; the buff yellow fascia of the upperside increased in width and extending over the whole of the cell to the base of the wing; fringe bistre, buff yellow at the tornus. Underside of hindwing buff yellow ; a small bistre spot on the discocellulars; a large patch of bistre in the apical area, extending almost to the upper angle of the cell and reaching the origin of veins M3 and Cu1; fringe bistre in the apical area, the remainder buff yellow.

Expanse : 33 25-29 mm.

1 3 (holotype), Kina Balu, N. Borneo; also, in the British Museum, ex Oberthür collection, 4 33 (paratypes), Kina Balu, 5.viii.1903 (John Waterstradt), and 1 3 (paratype), Kina Balu, January 1894.

Resembles Aroa flaveofusca Swinh. (1902), but appears to be a distinct species. The buff-yellow areas in A. celaenostola are replaced by ochraceous orange in A. flaveofusca. The lighter patches on the wings of both species vary considerably in area in different specimens.

# 28. Aroa leucogramma meridionalis subsp. nov. (Plate I, fig. 14).

 $\eth$ . Palpus pinkish buff. Antennal shaft pinkish buff, peetinations snuff brown. Head, legs, thorax, and peetus pinkish buff. Abdomen pinkish buff mixed with drab. Forewing and fringe pinkish buff slightly shaded with drab; a curved whitish streak on the discocellulars, varying considerably in width in the paratypes; in the angles at the bases of veins M2, M3, Cu1, and Cu2 are patches slightly darker than the ground colour, not visible in some of the paratypes. Hindwing and fringe pinkish buff mixed with drab, lighter in the inner marginal area and proximal half of the costal area; a curved whitish streak on the discocellulars, varying considerably in width in the paratypes. Underside of both wings, and fringes, pale pinkish buff to pinkish buff, slightly shaded with drab; the pale streaks on the discocellulars of both wings faintly visible.

Expanse : 33 28-31 mm.

1 3 (holotype) and 163 33 (paratypes), Manila, Luzon, in each of the months November to March, and May, 1911 to 1914 (A. E. Wileman); also, in the British Museum collection, 2 33 (paratypes), with similar data.

The two original specimens of Aroa (Caenina) leucogramma Fldr. are in the Tring Museum, and are of Semper's collecting in Luzon. The colour of fore- and hindwings is a very dark brown (Prout's brown to mummy brown) comparable to Aroa luisa Pag., 1885 (= niasana Swinh., 1907). The subspecies described above, from a very large series taken at Manila, varies in colour of forewing from a light to a medium shade of brown, and does not in any case approach to A. leucogramma Fldr. No  $\varphi\varphi$  of this or allied species appear to be known, and they are possibly wingless. I have followed Semper's arrangement in placing this species in Aroa, but a revision of the genus is clearly necessary.

#### 29. Opoboa chrysoparala spee. nov. (Plate I, fig. 38).

 $\mathcal{J}$ . Palpus whitish, on the outer side snuff brown. Antennal shaft whitish, peetinations cartridge buff. Head, thorax, and abdomen white, the latter with dorsal tufts on the basal segments. Legs, peetus, and venter whitish. Wings translucent, iridescent in certain lights, thinly sealed. Forewing whitish; a subbasal interneural fuscous black spot below the cell, and a similar spot subterminally between veins R5 and M1; a pinkish buff medial shade, broad and indistinct (not visible in the paratypes), running from the upper angle of the cell to the inner margin at one-half; a series of indistinct pinkish buff terminal markings on the veins (not visible in the paratypes); fringe white. Hindwing whitish; a well-defined fuscous to fuscous black fascia, running down the centre of the wing from a point just above the cell, angled inwardly at the lower margin of the cell, thence to the inner margin at one-half; a subterminal fuseous black spot between veins M1 and M2; fringe white. Wings beneath whitish, iridescent in certain lights; fringes white.

Expanse : 33 28-34 mm.

1 ♂ (holotype), Takwa, Gold Coast (R. E. James) ; 2 ♂♂ (paratypes), Warri, S. Nigeria, January 1896 and September 1897 (Dr. Roth) ; 1 ♂ (paratype), Massadou, near Macenta, French Guinea, at light, 1,600 ft., 16.v.1926 (C. L. Collenette), British Museum, ex Joicey collection.

Nearest to Opoboa schützei Tessm., but quite distinct therefrom. In O. schützei the wings are hyaline.

The genus *Opoboa* has been grouped formerly with the *Pterothysanidae*, but is here included with the *Lymantriidae*.

# 30. Laelia phaeobalia sp. nov. (Plate I, fig. 16).

3. Palpus pinkish buff, with a patch of Prout's brown on the outside of the second segment. Antennal shaft cartridge buff, pectinations buffy brown with the bases fuscous. Head pinkish buff. Thorax pinkish buff, pale pinkish buff posteriorly. Abdomen pinkish buff, the base of each segment darker. Legs, pectus, and venter pinkish buff. Forewing pale pinkish buff mixed with snuff brown, the snuff brown predominating along the costa, in and beyond the cell; a postmedial series of seven equisized interneural Kaiser brown spots, roughly parallel with the termen to below vein M3, then oblique inwardly to below vein Cu2; fringe drab. Hindwing pale pinkish buff lightly shaded with snuff brown; fringe slightly darker than the wing. Underside of both wings pale pinkish buff mixed with snuff brown, the snuff brown predominating in the costal half of the forewing and along the costa of the hindwing; fringes drab.

Expanse : 33 27-29 mm.

1 3 (holotype), Kalewara, Central Celebes, January 1913; 2 33 (paratypes), Paloe, Central Celebes, 5.vi.1912 and 30.x.1912; all collected by Dr. Martin.

#### 31. Laelia amaurotera sp. nov. (Plate I, fig. 12).

 $\eth$ . Palpus porrect, projecting well beyond the head, snuff brown. Antennal shaft snuff brown, pectinations fuscous black at base, remainder sayal brown. Head, thorax, and legs snuff brown, abdomen somewhat lighter. Forewing snuff brown, with an uneven appearance due to darker scales scattered over the surface; a postmedial series of seven interneural fuscous spots, roughly parallel with the termen to below vein M3, then oblique inwardly to below vein Cu2, the last spot being larger than the others; fringe snuff brown. Hindwing snuff brown to drab, the fringe somewhat darker. Underside of both wings, and fringes, sayal brown.

Q. Resembles the  $\Im$ , with forewing darker and interneural spots less distinct. Expanse :  $\Im \Im 33-40$  mm.,  $\Im \Im 35-42$  mm.

1 3 (holotype) and 1  $\bigcirc$  (allotype), Bangnio, subprov. Benguet, Luzon, 5,000 ft., March and April 1912 (A. E. Wileman); also, in the British Museum collection, with the same data, 733 and 4  $\bigcirc$  (paratypes), and 3  $\bigcirc$ , June 1913 (paratypes). In the Tring Museum, 13 and 1 $\bigcirc$ , N. Luzon, 5,000-6,000 ft. (White-head).

# 32. Laelia lophietes sp. nov. (Plate I, fig. 17).

3. Palpus light ochraceous buff, the outer side of second segment darker. Antennal shaft cartridge buff, pectinations fuscous at base, remainder light ochraceous buff. Thorax and abdomen pinkish buff, patagium light ochraceous buff. Pectus and legs light ochraceous buff, mixed on tibiae and tarsi with drab. Venter pinkish buff. Forewing sayal brown, veins pinkish buff; in the cell and beyond it the colour is somewhat lighter, with a darker shade below the cell; a postmedial series of small fuscous spots, the one between veins M3 and Cu1 being more distinct than the others; fringe drab mixed with sayal brown. Hindwing cartridge buff, fringe pinkish buff. Underside of forewing cartridge buff, shaded with light ochraceous buff in the costal and terminal areas, the costa edged with snuff brown; fringe as on *upperside*. Hindwing cartridge buff, costal area shaded with light ochraceous buff; fringe as on *upperside*.

 $\mathfrak{Q}$ . Resembles the  $\mathfrak{Z}$ , but considerably lighter in colour, and without the postmedial series of spots.

Expanse : 33 41-45 mm., ♀♀ 43-48 mm.

1 ♂ (holotype), 1 ♀ (allotype), and 2 ♂♂ (paratypes), Haights Place, Pauai, subprov. Benguet, Luzon, 7.000 ft., November-December 1912 and July 1913; 3 ♀♀ (paratypes), Banguio, subprov. Benguet, Luzon, 5,000 ft., June 1913; also, in the British Museum collection, 1 ♀ (paratype) from Banguio, dated June 1913, and 3♂♂, 2 ♀♀ (paratypes), dated March 1912. All the foregoing were taken by A. E. Wileman. 1 ♀ (paratype), N. Luzon, 5,000 ft. (Whitehead).

May be placed near to Laelia striata Wileman (1910).

#### 33. Dasychira phenax sp. nov. (Plate I, fig. 26).

3. Palpus buffy brown mixed with fuscous black. Antennal shaft buffy brown irrorated heavily with bistre, and lighter towards the tip; pectinations buffy brown. Head and thorax buffy brown, a double streak of fuscous black longitudinally between the antennae, a single longitudinal streak of fuscous black down the centre of the patagium, and some fuscous black hairs and hairscales in the tegula. Abdomen cartridge buff mixed dorsally with tawny olive, and with fuscous black dorsal crests on the basal segments. Fore- and middlelegs with long bushy hair-scales, buffy brown, mixed on the tarsi with fuseous black; hindleg cartridge buff, the tarsus ringed with fuscous. Pectus and venter cartridge buff. Forewing with ground colour buffy brown ; a fuscous black subbasal fascia, running at right angles to the inner margin from costa to anal vein, thence outwardly oblique to inner margin; a whitish patch at the base of the inner margin; a spot of argus brown just below the cell between subbasal and antemedial faseias; an antemedial fascia composed of two sinuate lines of argus brown, basad of which is a more irregular line of deep mouse grey; a broad whitish streak running from the costa in the postmedial area (where the veins crossing it are defined with ground colour) through the reniform to the antemedial fascia at its junction with the lower margin of the cell; reniform with proximal margin a crescent of argus brown, distal margin a smaller crescent of deep mouse grey; a well-defined fuscous black postmedial fascia, outwardly oblique to stalk of veins R3 and R4, thence parallel with the termen to vein Cu1, bowed (concavity terminad) to Cu2, thereafter following an  $\leq$ -shaped course, with points directed basad, to the inner margin; following the line of the postmedial fascia, and forming a background thereto, a broad shade of deep mouse grey mixed with ground colour, terminating at the median fold; a series of subterminal neural streaks of deep mouse grey, which are continued narrowly to the termen; a crenate argus brown preterminal fascia, points on the veins and concavities terminad; fringe of ground colour, darker interneurally, and a dark line at its base on the termen. Hindwing whitish; a faint postmedial fascia indicated by a few hair-scales of buffy brown, mainly on the veins; some scattered hair-scales of buffy brown along the termen, more numerous at the apex ; fringe cartridge buff. Underside of forewing whitish ; a well-defined fuscous postmedial fascia, parallel with the termen, terminating at vein Cu2; the area from

the upper margin of the cell to the eosta, and from the postmedial fascia to the termen, shaded with buffy brown mixed with fuscous; fringe buffy brown, darker interneurally and mixed with cartridge buff towards the tornus. Underside of hindwing whitish; a well-defined fuscous postmedial fascia, parallel with the termen, ceasing at vein M2; fringe cartridge buff.

 $\bigcirc$ . Resembles the  $\neg$ , but in the forewing the whitish streak running through the reniform is much reduced, and the postmedial shade argus brown instead of deep mouse grey. Hindwing and fringe suffused with buffy brown.

Expanse : 33 26-31 mm ; 99 30-33 mm.

1  $\mathcal{J}$  (holotype) December 1901, 1  $\mathcal{Q}$  (allotype), 1  $\mathcal{J}$  and 1  $\mathcal{Q}$  (paratypes) April 1902, all Durban, Natal (G. F. Leigh); 3  $\mathcal{J}\mathcal{J}$  (paratypes), Natal (A. J. Spiller); also, in the British Museum collection, 7  $\mathcal{J}\mathcal{J}$  and 6  $\mathcal{Q}\mathcal{Q}$  (paratypes), bred February and March 1913, and 2  $\mathcal{J}\mathcal{J}$  (paratypes), bred December 1908 and 1909, all Durban, Natal (G. F. Leigh); 1  $\mathcal{J}$  and 1  $\mathcal{Q}$ , Howick, Natal.

This species appears to have been confused previously with *Dasychira lunensis* Hmpsn. (1905), and the labels of some of the above paratypes bear this name in the handwriting of G. F. Leigh. The two species are easily distinguished. In the  $_{\circ}$  of *D. lunensis*, which appears to be represented in collections only by the type, there is no whitish streak running through the reniform in the forewing, and the hindwing is dark.

#### 34. Dasychira amydra sp. nov. (Plate I, fig. 36).

3. Palpus pale pinkish buff, a patch of mummy brown on the outer side, the third segment cinnamon brown. Antennal shaft pale pinkish buff, pectinations einnamon buff. Head, thorax, and abdomen pale pinkish buff to pinkish buff; two small patches of cinnamon brown at the base of the patagium behind the antennae. Legs, pectus, and venter pale pinkish buff to pinkish buff; some cinnamon brown shading on the tarsus of foreleg, and a patch of the same colour on the front of the tibia. Forewing whitish; some indistinct mummy brown spots in the basal area; a mummy brown antemedial fascia, oblique outwardly from costa to cell, oblique inwardly across the cell to a point midway between lower margin of cell and the anal vein, thence oblique outwardly to the inner margin; the following markings in avellaneous: a series of spots along the costa and a spot in the centre of the cell; a streak on each side of the discocellulars, broken at the veins; a broad and diffused postmedial fascia, broken at the veins, narrowing towards the inner margin; a subterminal fascia formed of a number of short streaks, parallel with the veins, to the number of two between each vein; a series of terminal interneural spots; fringe whitish. Hindwing whitish; the termen produced to an angle opposite veins M3 to Cu2; series of very faint terminal and subterminal interneural avellaneous spots; fringe whitish. Underside of both wings, and fringes, whitish, and an avellaneous spot on the discocellulars; forewing with a postmedial fascia running from the costa to vein  $M_2$ ; an indistinct subterminal fascia not reaching the inner margin; interneural terminal spots between the apex and vein M1; hindwing with traces of a postmedial fascia, and a terminal spot between veins Rs and M1.

 $\bigcirc$ . Resembles the  $\circlearrowleft$ , but with tarsi of all legs, and front of tibia of foreleg, mummy brown. Markings on the *upperside* of forewing much reduced; the antemedial fascia represented only by a large mummy brown spot on the inner

margin; the other fasciae apparently composed as in the  $\vec{o}$ , but obsolescent. Upperside of hindwing without markings.

Expanse : 349 mm.; 273 mm.

1  $\circlearrowleft$  (holotype) and 1  $\updownarrow$  (allotype), Palawan, Philippines, August–September 1894.

In the British Museum, ex Joicey collection, are  $4 \ QQ$  from Mindanao, Philippines, entirely without markings on the wings, but of a form probably not separable from the above species.

This species strongly resembles *Dasychira lineata* Wlkr. (1855), but differs in several particulars. It may be distinguished in the  $\mathcal{J}$  by the shape of the sub-terminal fascia on the forewing, which is crenate in *D. lineata* and composed of parallel streaks in *D. amydra*.

It may be pointed out that *Dasychira lineata* Wikr. and *Imaus munda* Wikr. (1855) are clearly congeneric. Any alteration, however, would involve so many other species that I have for the time being followed the arrangement in Seitz.

# 35. Dasychira argyroides sp. nov. (Plate I, fig. 11).

J. Palpus cartridge buff, on the outer side fuscous. Antennal shaft whitish, pectinations ochraceous tawny. Head and thorax whitish mixed with buffy brown. Abdomen buffy brown mixed with whitish, anal tuft whitish. Pectus, venter, and legs whitish, the tibiae and tarsi spotted and ringed with fuseous. Forewing whitish mixed in varying proportions with wood brown, more heavily in the distal third of the wing; some irregular dark spots along the costa; traces of a subbasal and an antemedial fascia; a dark spot on the centre of the discocellulars ; a crenate postmedial fascia, points on the veins, concavities terminad, bowed with concavity basad from costa to vein Cu1, thence bowed with concavity terminal to inner margin ; an irregular subterminal fascia formed of interneural crescent-shaped spots; fringe whitish mixed sparsely with wood brown. Hindwing drab; fringe whitish mixed interneurally with drab. Underside of fore- and hindwings cartridge buff, mixed in an irregular manner with drab; a faintly visible dark spot on the discocellulars of both wings; fringes whitish, mixed interneurally on the hindwing with drab.

Expanse : 33 46 mm.

1  $_{\circ}$  (holotype), Kołambugan, Lanao, Mindanao, plains, 19.vi.1914 (A. E. Wileman); also, in the British Museum, ex Joicey collection, 1  $_{\circ}$  (paratype), Kołambugan, August-September 1922.

In appearance this species resembles a *Dasychiroides*, but in structure is a *Dasychira*.

36. Barlowia nephodes sp. nov. (Plate I, fig. 33).

♂. Palpus ochraceous buff, the third segment fuscous black. Antennal shaft fuscous black, pectinations buffy brown. Head ochraceous orange, the frons somewhat lighter. Thorax and abdomen ochraceous orange; a series of fuscous black spots dorsally on the abdomen and a further series laterally; anal tuft fuscous black. Legs fuscous black, with ochraceous buff hair-scales on femora and tibiae. Pectus and venter ochraceous buff to ochraceous orange. Forewing drab mixed with hair brown, the veins and fringe darker; a large flesh ochre spot filling the distal third of the cell, but not quite reaching the discoellulars; some flesh ochre mixed with the ground colour between cell and costa, and

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at the base of the inner margin. Hindwing flesh ochre; termen narrowly edged with fuscous; fringe fuscous. *Underside* of both wings as on *upperside*, but in the forewing flesh ochre is mixed with the ground colour over the whole of the basal half of the wing excepting the costa.

Expanse: 39 mm.

1 & (holotype), Bihé, Angola (Edward Sanders).

# 37. Lymantria hemipyra sp. nov. (Plate I, fig. 23).

 $\bigcirc$  Palpus capucine orange. Antenna fuscous black. Head Prout's brown. Thorax Prout's brown mixed sparsely with pearl grey; a collar of light coral red at the junction of head and thorax. Abdomen apricot orange. Legs capucine orange mixed with fuscous, the tarsi ringed with fuscous, the front of the femora light coral red; two pairs of spurs on the hindtibia. Pectus and venter capucine orange to apricot orange. Forewing Prout's brown; a broad indistinct antemedial fascia, shaped somewhat as in *Lymantria melete* Fawcett, indicated by scales of pearl grey mixed with the ground colour; distal third of wing with scattered pearl grey scales mixed with the ground colour; fringe Prout's brown, ochraceous buff at the vein-ends. Hindwing flesh colour, with an indistinct fuscous subterminal fascia; fringe flesh colour mixed with ochraceous buff. *Underside* of forewing fuscous, mixed with ochraceous buff and flesh colour in the terminal and apical areas and narrowly along the costa; fringe as on upperside.

Expanse : 99 38-39 mm.

1  $\bigcirc$  (holotype) and 7  $\bigcirc$  (paratypes). Uaso Nyiro, Kenya Colony, 2,200–2,400 ft., November–December 1920 (W. N. van Someren).

May be placed near to Lymantria gondana Swinh. (1903).

## 38. Lymantria monoides sp. nov. (Plate I, fig. 9).

 $\mathcal{J}$ . Palpus and head cinnamon buff, with a lighter patch at the base of the antenna. Antenna bistre, the bristles at the end of the pectinations cinnamon buff. Thorax and abdomen bistre, anal extremity Mars yellow. Legs cinnamon buff to pinkish buff, the femora light coral red, and a few hairs of the same colour at the distal end of mid- and hindtibiae. Pectus cinnamon buff to pinkish buff, the venter darker. Forewing snuff brown; an irregular bistre antemedial fascia, passing through the junction of vein  $Cu^2$  with the cell; a small fuscous spot in the cell midway between the antemedial and the discocellulars, and a further spot on the centre of the discocellulars; a broad bistre medial shade running straight across the wing, through the lower angle of the cell and at right angles to the inner margin; a crenate bistre postmedial fascia with concavities terminad and the points on the veins, oblique outwardly from costa to vein M1, then roughly parallel with the termen to the inner margin, where it touches the medial shade; a series of faint bistre interneural subterminal spots, obsolete in some of the paratypes; fringe snuff brown. Hindwing and fringe snuff brown. Underside of both wings snuff brown, with an indistinct bistre spot on the centre of the discocellulars ; fringes snuff brown.

Expanse : 33 44-49 mm.

1 ♂ (holotype) and 7 ♂♂ (paratypes), New Hanover, Bismarck Archipelago, February-April 1923 (A. S. Meek).

Allied to the variable *Lymantria sphalera* Collnt. (1930) from New Ireland, but much smaller and darker, and with fore- and hindwings of the same colour. The series shows little variation.

### 39. Lymantria cryptocloea sp. nov. (Plate I, fig. 6).

J. Palpus pinkish buff mixed with coral pink. Antenna drab, the bases of the pectinations fuscous. Head pinkish buff, with a few coral pink hair-scales at the junction of head and thorax and at the base of the antenna. (In one of the paratypes there is a well-defined collar of coral pink between head and thorax.) Head cartridge buff mixed with drab; a streak of drab across the centre of the patagium and along the tegula. Abdomen cartridge buff. Legs and pectus pinkish buff slightly tinged with coral pink. Venter cartridge buff. Forewing whitish, crossed by a number of crenate bistre fasciae; the subterminal fascia ends with a rather broad patch of bistre opposite the tornus; a terminal series of interneural bistre spots; a small patch of coral pink at the base of the costa (continued in one of the paratypes along the costa to the apex); an irregular series of bistre spots along the cost to the apex; a bistre spot in the cell, followed by an angled bistre streak on the discocellulars; fringe whitish marked with bistre interneurally. Hindwing pale pinkish buff to cartridge buff; terminal and costal areas broadly but faintly shaded with bistre; fringe pale pinkish buff, marked interneurally with bistre. Underside of forewing, and fringe, pale pinkish buff; the bistre markings of the upperside faintly reproduced, and traces of coral pink along the costa. Underside of hindwing and fringe pale pinkish buff, with slight bistre shading in terminal and costal areas.

Expanse : 33 29-34 mm.

1  $\mathcal{J}$  (holotype), Kolambugan, sub-province Lanao, Mindanao, plains at sealevel, 2.vi.1914 (A. E. Wileman); also, in the British Museum collection, 2  $\mathcal{J}\mathcal{J}$ (paratypes) collected by A. E. Wileman at the same place on 19 and 20.v.1914. There is a further  $\mathcal{J}$  in the British Museum, ex coll. Oberthür, labelled "Philippines" and agreeing well with this species.

I take this opportunity to publish the following cases of synonymy :

(Leucoma albifrons B.-Bak., 1911) = Stilpnotia parva Plötz (Leucoma), 1880.

Porthmeia (radiata B.-Bak., 1916) = subnigra B.-Bak., 1908.

Euproctis (nigripennis Hmpsn., 1893) = (Pida) lativitta Moore, 1879.

Euproctis (flexuosana Strand, 1923) (nom. nov. for flexuosa Wilem., 1910) = labeculoides Strand, 1914.

(Artaxa enunciativa Swinh., 1892) = Euproctis atrosquama Wlkr. (Gogana), 1866. Euproctis (lunula B.-Bak., 1908) = luteomarginata B.-Bak., 1908.

(Chaerotricha armandvillei Obthr., 1894) = Euproctis dichroa Fldr. (Cispia), 1861. The type of E. dichroa Fldr. cannot be found and must be regarded as lost.

Felder's description seems to leave no doubt of the above synonymy.

Dasychiroides (nigrostrigata B.-Bak., 1904) = obsoleta B.-Bak., 1904.

(Ornithopsyche anthora Fldr., 1874) = Aroa difficilis Wlkr., 1865. Walker's type is a  $\mathcal{Q}$ , not a  $\mathcal{J}$  as stated in his description.

(Orgyia flavovittata Pag., 1900) = Aroa cometaris Btlr., 1887.

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Aroa (niasana Swinh., 1907) = luisa Pag., 1885.

(Topomesa subinanis Wlkr., 1866) = Scarpona ennomoides Wlkr., 1862. Therefore Topomesa Wlkr., 1866 (genotype T. subinanis Wlkr.), sinks to Scarpona Wlkr., 1862 (genotype S. ennomoides Wlkr.).

Laelia (formosana Mats., 1921) = (Laelia) sangaica formosana Strand, 1914.

Dasychira (vitensis B.-Bak., 1905) = fidjiensis Mab. & Vuill., 1890.

Lymantria (melanopogon Strand, 1914) = nebulosa Wilem., 1910.

(Euproctis) fusipennis WIkr., 1862, is a Porthesia Steph.

(Etobema) circumdata Wlkr., List Lep. Ins. B.M., xxxii, p. 388 (1865), is a Rajacoa Swinh. The species has been wrongly omitted in Seitz, and must not be confused with Genusa circumdata Wlkr., List Lep. Ins. B.M., iv, p. 819 (1855).

(Dasychira) suspecta Her., 1926, is a Noctuid.

(Aroa) exoleta Swinh., 1892, is an Anthela WIkr. (Anthelidae).

Chenuala (rufa Swinh., 1892) = (Ocneria) heliaspis Meyr., 1891.

The genus is rightly included by Swinhoe in the Anthelidae.

(Dasychira) signifera Wlkr., 1862, is an Ocinara Wlkr. (Bombycidae).

(Artaxa) metaleuca Wlkr., 1862, is a Darna Wlkr. (Limacodidae).

## EXPLANATION OF PLATE I.

# (Life size.)

Fig.	1.	Euproctis ochrocerca sp. nov., type $\Im$ .				p. 166
,,	2.	Euproctis talesca sp. nov., type $\mathcal{J}$ .				p. 169
,,	3.	Euproctis asaphobalia sp. nov., type $\mathcal{Q}$				p. 167
· · ·	4.	<i>Euproctis ochrocraspeda</i> sp. nov., type $\mathcal{Q}$				p. 166
,,	5.	Euproctis aeruginosa sp. nov., type 3				p. 168
,,	6.	Lymantria cryptocloea sp. nov., type 3				p. 178
· ·	7.	Euproctis frigidior sp. nov., type 3.				p. 162
,,	8.	Euproctis florensis sp. nov., type 3				p. 162
,,	9.	Lymantria monoides sp. nov., type 3.				p. 177
,,	10.	Aroa celaenostola sp. nov., type 3				p. 171
· · ·	11.	Dasychira argyroides sp. nov., type $\mathcal{J}$ .				p. 176
33	12.	Laelia amaurotera sp. nov., type 3				p. 173
3 2	13.	Euproctis ochropleura sp. nov., type 3				p. 164
,,	14.	Aroa leucogramma meridionalis subsp. n	ov., typ	be ♂		p. 172
,,	15.	Euproctis diselena sp. nov., type 3				p. 167
· · ·	16.	Laelia phaeobalia sp. nov., type $\mathcal{J}$ .				p. 173
,,	17.	Laelia lophietes sp. nov., type $\vec{o}$ .	•			p. 173
,,	18.	<i>Euproctis gita</i> sp. nov., type $\bigcirc$ .	•			p. 168
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55	20.	Euproctis fulvobrunnea sp. nov., type of				p. 163
55	21.	Porthesia stenoptcra sp. nov., type 3.			•	p. 160
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,,	26.	Dasychira phenax sp. nov., type $3$ ,				p. 174

Fig.	27.	Euproctis celidota, sp. nov., type 3.	•			p. 170
**	28.	Dasychiroides nesites nesites sp. nov., type	3		•	p. 170
>>	29.	Euproctis petasma sp. nov., type $\mathcal{J}$ .				p. 163
	30.	Porthesia anomoeoptena sp. nov., type 3				p. 161
>>	31.	Euproetis geometroides sp. nov., type $\sigma$			•	p. 165
3.2	32.	Euproctis gilvivirgata sp. nov., type $Q$				p. 165
"	33.	Barlowia nephodes sp. nov., type $\mathcal{J}$ .				p. 176
,,	34.	Cropera sericoptera sp. nov., type $\mathcal{J}$ .				p. 159
""	35.	Euproctis hypocloa sp. nov., type $\delta$ .				p. 169
,,	36.	Dasychira amydra sp. nov., type $\mathcal{J}$ .				p. 175
,,	37.	Redoa kibwezi sp. nov., type 5				p. 159
,,	38.	Opoboa ehrysoparala sp. nov., type $\mathcal{J}$ .				p. 172

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